

Chana: Demand, Supply and Price Outlook: 2008

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Summary

The domestic output of chana is likely to drop to 47.5 lakh to 50 lakh tons against the official estimate of 58.3 lakh tons due to adverse climatic condition in the major key producing states. In the current season, the total availability of chana is expected to remain around 55.07 lakh to 57.57 lakh tons while demand is likely to be around 60-61 lakh tons.

The prices of chana are expected to remain at higher levels due to difference in demand and supply figures. Government policies, inflation, procurement by big companies, exchange rate and interest rate are some of the factors that are going to affect the prices and demand of chana. This season chana is likely to move in the range of Rs 2600-Rs 3200 per quintal.

Introduction

Chana is one of the major crops in India contributing around 40%-45% in the total domestic pulses production. India is the leading producer of chana in the world. India contributes 60%-65% in the world's total chana production. In India, there are two varieties of chana - namely Desi and Kabuli, which contribute around 85%-90% and 10%-15% in total chana production respectively.

Chana is a good source of protein. It contains 25%-29% of protein, 5% fats and 55% carbohydrates. In India, chana is used in the form of chana dal and floar - popularly know as *Besan*.

Madhya Pradesh, Rajasthan, Maharashtra, Karnataka, Uttar Pradesh, Andhra Pradesh, Gujarat and Chhattisgarh are major chana-producing states in India.

In India, chana is sown during September-November while harvesting commences by February-March.

India is the leading producer, consumer and importer of chana in the world. Chana is used as one of the most common diet in India due to its rich protein contents. Despite leading producer, India has to import the commodity due to its huge domestic demand.

Supply

A) Domestic production

In the last 10 years, the domestic production of pulses in the country has remained in the range of 1.10-1.49 crore tons. In 1998-99, the output of pulses was 1.49 crore tons whereas in 2000-01 the figure dropped to 1.10 crore tons. However, excluding the year 2000-01 and 2002-03 that witnessed drastic fall in pulses production, figures of last 10 years show pulses production in the range of 1.31-1.19 crore tons.

According to second advanced estimate of the Central government, the output of pulses is likely to edge up by 1.40 lakh tons to 1.434 crore tons. However, the above figure is under several question marks. A section of traders is of the view that apart from lower acreage, severe cold waves and untimely rains in many key chana-producing areas are likely to reduce chana output nearly by 13 lakh tons against last years' figures. According to the report of Crop Weather Watch Group, this year total area under rabi and kharif pulses is reported to be around 2.58 crore hectares against 2.54 crore hectares of last year.

The acreage under chana keeps on changing year to year depending upon various factors such as weather, government policies and other remunerative crop of the season. This year, the area under chana is expected to decline by four lakh hectares to 84.34 lakh hectare. Last year, favorable weather and attractive prices of chana had scaled its acreage to 84.02 lakh hectares.

This year, unfavorable weather conditions and unattractive prices of chana diverted farmers towards wheat and other alternative crops. Major fall in acreage is seen in Madhya Pradesh, where traditional chana farmers diverted towards wheat due to better remuneration.

The acreage of chana fell by 7.8% in Karnataka and 24.6% in Uttar Pradesh. In UP, the area under chana reduced significantly due to lack of rains. However, in Rajasthan the picture is just reverse. Here, area under chana increased by 1.1% as farmers preferred chana than mustard. In Gujarat, Maharashtra and Chhattisgarh also, the acreage of Chana scaled up by 7.3%, 3.2% and 10.9% respectively.

The complete picture indicates 5% fall in chana acreage. Apart from lower acreage, adverse climatic condition also affected chana crop to some extent. In Madhya Pradesh, chana crop got severely damaged by cold waves and fog. In MP, chana output is likely to reduce by 20% to 18-19 lakh tons. Bad weather in the State also affected the quality of the crop. Fresh arrival has started in MP but the new crop coming in the market is not suitable for making Dal.

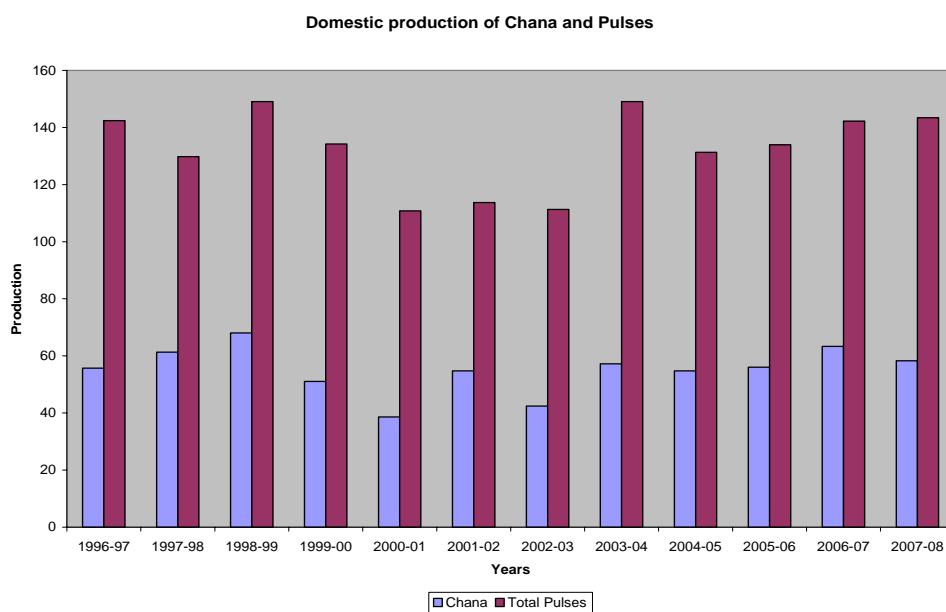
In Rajasthan, the second leading producer of chana, the output is expected to decline by two lakh tons to seven lakh tons besides increase in acreage. Production is expected to decline in Rajasthan, Karnataka, Uttar Pradesh and Andhra Pradesh whereas Maharashtra, Gujarat and Chhattisgarh are expected to witness surge in the output.

TABLE NO. 1
State-wise production of Chana for 2007-08*

Chhattisgarh	1
Others	2
Total (Production in lakh tons)	47.5-50
Madhya Pradesh	18-19
Maharashtra	8-9
Rajasthan	7
Utter Pradesh	3.5
Gujarat	3-3.5
Andhra Pradesh	3
Karnataka	2

*Predictions of Commoditiescontrol.com

** According to second advanced estimate of the Central government, the domestic production of Chana in 2007-08 is expected to be 58.3 lakh tons.



Domestic acreage, production and yield of pulses

Year	Chana			Other Pulses		
	Acreage	Production	yield	Acreage	Production	yield
1996-97	68.50	55.70	813	224.50	142.40	635
1997-98	75.60	61.30	811	228.70	129.80	567
1998-99	84.70	68	803	235	149.10	634
1999-00	61.50	51.20	833	211.20	134.20	635
2000-01	51.90	38.60	744	203.50	110.80	544
2001-02	64.20	54.70	853	220.10	133.70	544
2002-03	59.10	42.40	717	205	111.30	543
2003-04	70.50	57.20	811	234.60	149.10	635
2004-05	67.10	54.70	815	227.60	131.30	577
2005-06	69.30	56	808	223.90	133.90	598
2006-07*	76.3	63.3	-	237.60	142.20	-
2007-08**		58.30	-	-	143.40	-

Carry forward stock

According to official estimates, the output of chana in 2006-07 was 63.3 lakh tons while 1.27 lakh tons was imported. The total availability in 2006-07 was 64.57 lakh tons, out of which 60 lakh tons got consumed leaving 4.57 lakh tons as carry forward for 2007-08.

Global production and Import

Chana is one of the major leguminous crops in the world. Across the globe, it is grown in more than one crore hectares. In the last five years, the production of chana has remained in the range of 70.85-88.32 lakh tons. Out of the total chana output, India contributes the major share of around 60-65%. In 2006-07, 86.5 lakh tons of chana was produced globally, of which the share of Desi and Kabuli chana was 66.45 lakh tons and 20.65 lakh tons respectively.

	2002-03	2003-04	2004-05	2005-06	2006-07*
Acreage (lakh hectare)	99	109	105	107	108
Yield(ton/ hectare)	0.72	0.8	0.79	0.82	0.8
Opening Stock	4	1	4	3	5

(Lakh tons)					
Production in lakh tons					
India	42.40	57.20	54.70	56.5	57
Turkey	6.5	6	6.2	6.1	6.1
Pakistan	3.62	6.75	6.11	8.68	4
Australia	1.39	1.86	1.23	1.38	3.04
Iran	3	3.1	3.1	3.1	2.8
Mexico	2.35	2.4	2.4	2.4	2.4
Myanmar	2.12	2.28	2.3	2.3	2.3
Canada	1.56	0.68	0.51	1.04	1.63
Ethopia	1.87	1.14	1.36	1.35	1.35
Iraq	0.97	1.04	1	0.95	1
America	0.38	0.2	0.27	0.49	0.67
Seria	0.89	0.87	0.45	0.55	0.55
Spain	0.7	0.51	0.57	0.18	0.4
Morcio	0.51	0.43	0.42	0.42	0.4
Others	2.59	2.75	2.71	2.88	2.86
Total	70.85	87.21	83.33	88.32	86.5
Total Production of Kabuli Chana	21.03	18.85	18.71	19.14	20.05
Total Production of Desi Chana	49.82	68.66	64.62	69.18	66.45
Total Supply	74.85	88.21	87.33	91.32	91.5
Total Consumption	73.85	84.21	84.33	86.32	86.5
Closing Stock	1	4	3	5	5
Stock and consumption ratio	1	5	4	6	6

* Expected

The global output of chana in 2007-08 is likely to wither due to reduced output in India, the leading producer of the crop. The production of chana in Turkey and Pakistan is also likely to drop down in current season while Australia and Canada is expected to witness surge in production figures. Turkey is expected to produce 6.1 lakh tons. In Pakistan, chana output is likely to drop to 7.61 lakh tons against 8.48 lakh tons (According to recent estimates of the Pakistan government and other agencies, chana production is likely to fall further to four lakh tons).

In Pakistan and Turkey, consumption is expected to remain below the production figure, thus leaving sufficient quantity for exports. However, ban on Dal exports from Pakistan has diminished export probability from the country.

In Australia, chana output is likely to rise to 3.13 lakh tons against 2.32 lakh tons produced last year. However, export is likely to shrink to 1.96 lakh tons. Following Australia, Canada is also expected to produce 2.25 lakh tons against 1.63 lakh tons produced last year. Export from Canada is likely to rose by 1.25 lakh tons from

earlier 1.15 lakh tons. This year, only limited quantity of chana could be imported from Myanmar, Iran, Mexico and Ethiopia due to supply constraint.

In 2007-08, India is likely to import three lakh tons in comparison to 1.27 lakh tons imported last year.

Total pulses and chana import

Pulses	Year	2002-03	2003-04	2004-05	2005-06	2006-07
	Country	In tons				
Chana	Australia	12,538	44,476	13,917	58,350	74,882
	Iran	57,026	32,208	56,455	30,509	0
	Myanmar	35,459	62,550	21,725	17,597	25,710
	Pakistan	75	25,683	425	122,316	22
	Canada	59,810	50,055	10,251	4,986	7,982
	Others	52,646	44,267	30,103	47,998	18,722
Chana	Total	217,553	259,239	132,875	281,756	127,318
Total Pulses		1,266,480	2,157,648	1,586,892	1,944,837	2,822,359

Demand

Pulses are one of the most common diets of Indian populace due to its rich protein contents and cheap prices and easy availability. However, after independence, the per capita consumption of pulses reduced drastically. Production of almost all crops increased significantly after the green revolution to keep pace with the rising population, but pulses moved very slowly. The government has launched many policies from time to time to increase the production of pulses.

In India, consumption of chana is more than any other pulses. Out of total output, 60-65% of chana is used in the form of flour while 15-20% as pulses. Rest 20% is utilized for sowing.

According to last 11 years' data, the per capita consumption of pulses has remained in the range of 13.5-10.6 kilo per annum. Of which the consumption of chana is around 5.3-2.9 per kg.

The buying behavior in India is largely affected by price volatility. Despite increase in per capita income, high prices of pulses adversely effect pulses consumption in India. Consumer section in India tends to shift to different alternate options depending upon price movement. Mostly middle and lower-middle-class shifts to cheap grains and vegetables when prices of chana moves northwards while upper-middle-class tends to prefer green vegetables, fruits, dairy products and meat.

In India, the average growth rate of pulses production and consumption during 2003-2006 is -1.96% and +3.41% respectively. As a result of big gap in demand and supply figures, India had to import pulses in large quantity.

Year	Rice	Wheat	Other grains	Total Grains	Chana	Pulses	Per capita consumption
	Kg (Per person/year)						
1996	74.6	64.3	22.6	161.5	4.1	12	173.5

1997	78.1	65.4	26.6	170.1	4.5	13.5	183.6
1998	73.1	55.3	22.8	151.2	4.9	12	163.2
1999	74.2	59.2	23.1	156.70	5.3	13.3	170
2000	74.3	58.4	21.5	154.3	3.9	11.6	165.9
2001	69.5	49.6	20.5	141	2.9	10.9	151.9
2002	83.5	60.8	23.1	167.4	3.9	12.9	180.4
2003	66.2	65.8	17.1	149.1	3.1	10.6	159.7
2004	71.3	59.2	25.3	155.8	4.1	13.1	168.9
2005	64.7	63.3	21.7	142.7	3.9	11.5	154.2
2006	72.3	56	22.1	150.4	-	11.8	162.3

This year, the total consumption of pulses in the country is expected around 1.6 crore tons, of which consumption of chana alone is 60-61 lakh tons. Continuous growing domestic demand of pulses and almost stagnant production has resulted in surge in import figures.

In 2006-07, 28 lakh tons of pulses were imported in the country. However, last year only 1.27 lakh tons of pulses were imported due to big domestic crop size. In 2007-08, India is expected to import more than 30 lakh tons pulses. In 2007-08, the import of chana is expected to rise to three lakh tons due to lower production against the 1.27 lakh tons imported last year.

Demand and supply analysis

The output of chana is expected to remain around 47.5-50 lakh tons current season. In order to fulfill domestic demand and curb rising pulses price, the Central government has banned export of chana from the country. Total availability in the season is expected to remain around 55.07-57.57 lakh tons, including 4.57 lakh tons of carry-forward stock and three lakh tons of import, while the demand is expected to be around 60-61 lakh tons.

Balance sheet-2008*

Opening Stock	4.57
Production	47.5-50
Import	3
Total supply	55.07-57.57
Demand	60-61
Ending Stock	0

All figures in lakh tons

*Predictions of commoditiescontrol.com

Price Analysis

Last year, movement of chana was very sluggish in the market due to higher domestic output. Whereas this year, prices of chana sky-rocketed on apprehension of lower crop. In Delhi, spot chana was offered around Rs 2200 in January while prices jumped to Rs 2800 in February.

Full-fledged arrivals have started coming to the markets in Karnataka, Maharashtra, Andhra Pradesh and Gujarat. In-flow of fresh crop is gradually increasing in Madhya Pradesh and Rajasthan also. Chana is expected to trade under pressure till May end due to sluggish demand and arrival pressure in the local markets. During this period, chana prices are expected to take correction of Rs 100-Rs 150/quintal.

In June, chana prices could see good northward movement on the back of slow arrivals and increased demand. Again, the imported shipments of chana from Tanzanian and Australia, that is expected to reach Indian port in between August – December, could pressurize the prices.

The demand and supply scenario of chana indicates prices to trade in the range of Rs 2,600-Rs 3,200/quintal.

Procurement by big companies

Large corporate houses are expected to jump into the markets. In Madhya Pradesh, some big companies are reported to have procured chana from the local markets. These companies stock the commodity and release the stocked goods as per the price movement in the market. Procurement by big companies builds positive sentiments in the market and helps prices to move northwards.

Mixing of peas

White Peas is mixed in Chana Dal and Besan due to its cheap rate and easy availability. Mixing of White Peas affects the prices negatively. In the third week of March 2008, White Peas were ruling in the range of Rs 2,200-Rs 2,250/quintal while chana was quoted around Rs 2,650-Rs 2,700/quintal in the same duration. Thus, there is a difference of around Rs 400/quintal between the two pulses. And if such a big difference continues, it would increase the probability of mixing. Contamination of White Peas in Chana Dal affects the price negatively.

The production of Peas has declined in the current year but sufficient output in Canada and America could result in increased imports from these countries. In 2006-07, 13.88 lakh tons were imported.

Macroeconomic factors

Macroeconomic factors affect both demand and prices of chana. However, there is very little contribution of pulses in economic growth rate and private final consumption expenditure. But, other microeconomic factors such as inflation and interest rates directly affect the prices and demand of chana.

In 2005-06, the share of pulses in private final consumption expenditure was only 1.1% despite a firm growth rate. However, in 2002-03, the share of pulses rose to 1.2% in private final consumption expenditure against the lower growth rate of 3.8%.

It means there is less chance of pulses consumption to be affected negatively by dropping growth rate. However, other factors such as increasing inflation, change in interest rates and volatility in Indian Rupee affect the demand and supply of chana.

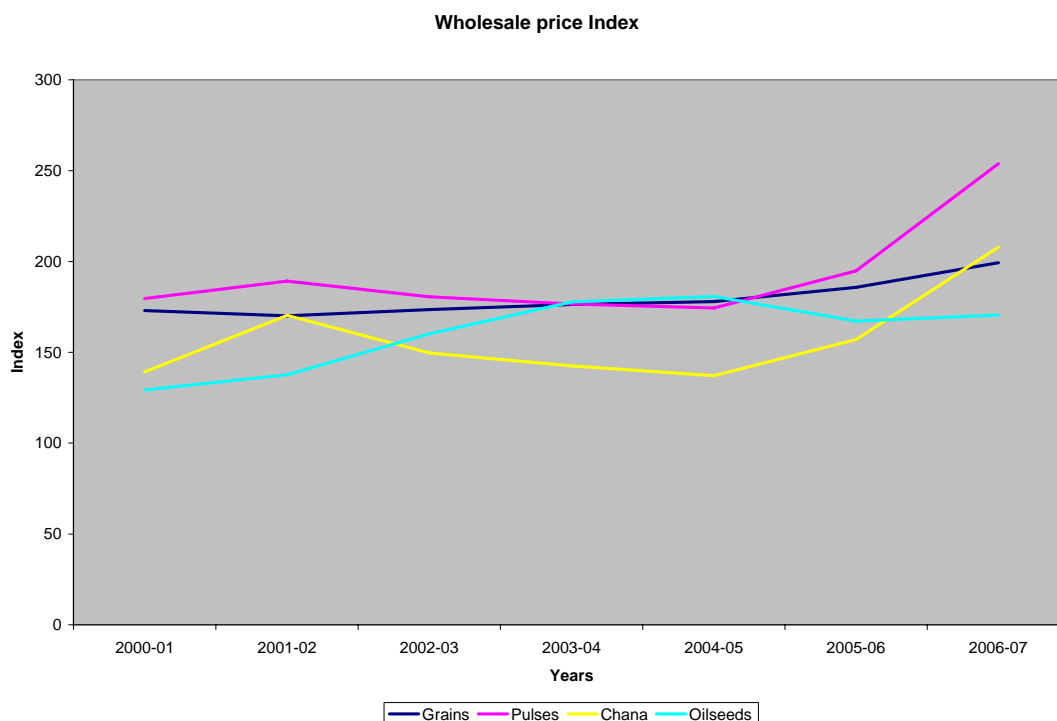
In case if there is increase in inflation, there is high probability of surge in interest rates that could pressurize chana price. On the other side, continuous weakening of Indian Rupee is making imported chana comparatively cheaper.

The complete waiver of Rs 60,000 crore to marginal and small-scale farmers in the Budget 2008-09 is done with an intention of providing financial assistance to farmers. Financially-strong farmers would spend more money on consumable goods, which is again positive for both demand and prices of chana and other pulses.

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Share of pulses in private final consumption expenditure	1.2	1.4	1.2	1.4	1.2	1.1	1.1
GDP growth rate on factor cost	4.4	5.8	3.8	8.5	7.5	9.4	9.6

Government policies

Lower production and price hike in the international market has scaled domestic prices of pulses up. In the period of 2004-05 to 2006-07, the whole price index of pulses rose by 45.6% while grains index rose by 12%. During the same period, wholesale prices index of chana recorded a rise of 51%.



Whole sale price index

Commodity	Weight	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
	50.1	173.8	172.4	174.3	176.3	177.5	187	205.9
(A) Grains	4.41	173	170.1	173.5	176.3	177.9	185.8	199.3
Rice	2.45	167.5	167	166	168.8	168.2	174.5	179.6
Wheat	1.38	176.6	175.3	175.7	181.4	184.1	191.5	216.4
(B) Pulses	0.60	179.6	189.2	180.6	176.6	174.4	194.9	253.9
Chana	0.22	139.2	170.3	149.7	142.5	137.1	157	208
Tur	0.13	150.3	142.6	157.5	172.8	179.3	170.8	182.1
Moong	0.11	186.9	205.6	208	195.9	187.4	219.2	302.8
Masoor	0.04	206.8	203.9	214.1	233.4	234.7	242.8	253.5
Urad	0.10	295.7	273.9	239.8	217.4	216.3	270.4	404
Consumable goods	15.40	170.50	176.1	179.20	181.5	186.3	195.3	210.6
Non Consumable goods	6.14	146.5	152.9	165.4	186.3	187.6	179.10	187.9
Oil seed	2.66	129.3	137.6	160.2	177.8	18.8	167.1	175.6
Edible oil	2.75	103.3	112.9	138	157.9	156.4	146	154.7

The Government of India has taken several measures to control rising prices of pulses. Some of these measures are as follows:-

- The Government of India has started "*Rashtriya Khadya Sukrasha Mission*" with an aim to produce additional 80 lakh tons wheat, one crore ton rice and 20 lakh ton pulses.
- The government rose minimum support price of chana to Rs 1,600 from Rs 1,445, of Tur to Rs 1,550 from Rs 1,410, minimum support price for Moong and Urad is kept same at Rs 1,700/quintal from earlier price of Rs 1,520.
- Banned futures trading in Tur and Urad.
- Imposed limit on pulses stock in 2006.
- Imposed ban on export of all kind of pulses from the country except Kabuli in June 2006.
- In June 2006, the government removed 10% duty on import of pulses.
- Provided 15% subsidy to government agencies for importing pulses.
- Directed government agencies to increase import of pulses.

The main concern of the government today is the rapidly increasing inflation. On March 07, 2008, WPI inflation rose to 5.11% against 5.02% recorded last week. As consumable goods contribute major part in the rising inflation, the Government of India is taking all possible steps to keep check on rising consumable goods' prices.

On March 17, 2008, Finance Minister P Chidambaram, in his Parliamentary speech, said, "We would take all necessary financial and monetary actions to curb rising inflation and to keep economic growth rate at 9%."

If the prices of pulses go on increasing, the government could take adequate steps to control the same. These measures could be in the form of subsidy, de-hording and increase imports.

Substitution

As a result of rising chana prices, consumers could shift to other cheap pulses or alternate consumable goods.